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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,904	08/30/2001	Vincent J. Zimmer	42390P11190	2083

7590 10/19/2006	EXAMINER
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP	MANOSKEY, JOSEPH D

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ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.**	**Applicant(s)**
	09/943,904	ZIMMER ET AL.
	Examiner	**Art Unit**
	Joseph D. Manoskey	2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 July 2006</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 August 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

2.   Claims 19-27 are rejected under 35 U.S.C. 101 because the claimed invention is
directed to non-statutory subject matter. The claim is directed towards and "an
apparatus" composed of "a BIOS firmware" and "a firmware update utility". This is a
program pro se and is non-statutory subject matter.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Christeson et al., U.S. Patent 5,579,522, hereinafter referred to as "Christeson", in view
of Wu et al., U.S. Patent 6,732,267, hereinafter referred to as "Wu".

5.   Referring to claim 1, Christeson teaches a method of dynamically updating BIOS

firmware parts that includes both normal BIOS and recovery BIOS and using an

additional BIOS region to extend the system BIOS memory area, this is interpreted as

adding a new initiation module to a BIOS firmware of a computing system, the BIOS

firmware having a plurality of initiation modules including recovery initiation modules for

recovery of the computing system and non-recovery modules (See Col. 1, lines 25-45

and Col. 2, lines 15-57).

Christeson also teaches the verification of the flash memory area which includes

the BIOS, this is interpreted as automatically evaluating new initiation module (See Col.

3, lines 26-35 and Col. 4, lines 49-51). Christeson also discloses storing BIOS

instructions in the flash memory. The BIOS includes both a normal BIOS in one

memory block and recovery BIOS in another area of the flash memory, or the

"designated" recovery area of the flash memory. Finally, Christeson teaches updating

the BIOS including the recovery portion. This is interpreted as designating the new

initiation module as a recovery initiation module if the new initiation is required for the

recovery of the computing system (See Col. 2, lines 41-57).

Christeson does not teach the computer system having an extensible firmware

architecture, however Christeson does teach about updating the BIOS and rebooting in

the process (See Col. 12, lines 50-57). Wu teaches updating a system BIOS which

includes a Extensible Firmware Interface (See Col. 3, lines 45-52). It would have been

obvious to one of ordinary skill in the art at the time of the invention to combine the

BIOS update of Christeson with the EFI of Wu. This would have been obvious to one of

ordinary skill in the art at the time of the invention to do because the EFI is dedicated to

the booting environment (See Wu, Col. 3, lines 45-52).

6.   Referring to claim 2, Christeson and Wu disclose all the limitations (See rejection

of claim 1) including have a block containing all the recovery BIOS, and all parts of the

BIOS in the recovery block are part of the recovery BIOS, this is interpreted as

designating the new initiation module as a recovery initiation module if another recovery

initiation depends upon the new initiation module (See Christeson, Col. 2, lines 52-57).

7.   Referring to claim 3, Christeson and Wu teach all the limitations (See rejection of

claim 2) including a recovery mode that executes the recovery BIOS, this is interpreted

as executing only recovery initiation modules in an event of a recovery restart (See

Christeson Col. 3, lines 16-25).

8.   Referring to claim 4, Christeson and Wu disclose all the limitations (See rejection

of claim 2) including updating the BIOS, this interpreted as an updated recovery

initiation module added to the BIOS firmware to replace an outdated recovery initiation

module (See Christeson, Col. 2, lines 15-20).

9.   Referring to claim 5, Christeson and Wu teach all the limitations (See rejection of

claim 3) including the verification of the flash memory area, this is interpreted as

automatically evaluating at least one of the recovery initiation modules (See Christeson,

Col. 3, lines 26-35). Christeson discloses updating the BIOS including recovery BIOS, this interpreted as removing the recovery initiation module designation from at least one of the recovery initiation modules if the designation is solely due to dependence thereon by the outdated recovery initiation module (See Col. 2, lines 15-20 and lines 52-57).

10.   Referring to claim 6, Christeson and Wu teach all the limitations (See rejection of claim 1) including locking the recovery BIOS, this is interpreted as wherein the recovery initiation modules are rendered unalterable (See Christeson, Col. 2, lines 52-54).

11.   Referring to claim 7, Christeson and Wu disclose all the limitations (See rejection of claim 6) including the recovery BIOS being located in non-volatile memory, this is interpreted as the initiation module reside in a fault-tolerant firmware block (See Christeson, Col. 2, lines 15-20).

12.   Referring to claim 8, Christeson and Wu teach all the limitations (See rejection of claim 7) including a block of code reference numbers "202", "203", "204" and "205" that add up to 64KB and contains the recovery BIOS, this is interpreted as the recovery initiation modules contained in a 64 kilobyte block of code (See Christeson, Fig. 2).

13.   Referring to claim 9, Christeson and Wu teach all the limitations (See rejection of claim 1) including discloses the recovery being used because of a corruption from power failure or other reasons, this is interpreted as recovery of the computing system

is necessitated by an event selected from the group consisting of power failure,

hardware failure, and security error (See Christeson, Col. 3, lines 1-4).

14.   Referring to claim 10, Christeson teaches a computer readable medium

containing instructions when executed on processor performs a method of dynamically

updating BIOS firmware parts that includes both normal BIOS and recovery BIOS and

using an additional BIOS region to extend the system BIOS memory area, this is

interpreted as adding a new initiation module to a BIOS firmware of a computing

system, the BIOS firmware having a plurality of initiation modules including recovery

initiation modules for recovery of the computing system and non-recovery modules (See

Col. 1, lines 25-45 and Col. 2, lines 15-57).

        Christeson also teaches the verification of the flash memory area which includes

the BIOS, this is interpreted as automatically evaluating the new initiation module (See

Col. 3, lines 26-35 and Col. 4, lines 49-51). Christeson also discloses storing BIOS

instructions in the flash memory. The BIOS includes both a normal BIOS in one

memory block and recovery BIOS in another area of the flash memory, or the

"designated" recovery area of the flash memory. Finally, Christeson teaches updating

the BIOS including the recovery portion. This is interpreted as designating the new

initiation module as a recovery initiation module if the new initiation is required for the

recovery of the computing system (See Col. 2, lines 41-57).

        Christeson does not teach the computer system having an extensible firmware

architecture, however Christeson does teach about updating the BIOS and rebooting in

the process (See Col. 12, lines 50-57). Wu teaches updating a system BIOS which

includes a Extensible Firmware Interface (See Col. 3, lines 45-52). It would have been

obvious to one of ordinary skill in the art at the time of the invention to combine the

BIOS update of Christeson with the EFI of Wu. This would have been obvious to one of

ordinary skill in the art at the time of the invention to do because the EFI is dedicated to

the booting environment (See Wu, Col. 3, lines 45-52).

15.   Referring to claim 11, Christeson and Wu disclose all the limitations (See

rejection of claim 10) including have a block containing all the recovery BIOS, and all

parts of the BIOS in the recovery block are part of the recovery BIOS, this is interpreted

as designating the new initiation module as a recovery initiation module if another

recovery initiation module depends upon the new initiation module (See Christeson,

Col. 2, lines 52-57).

16.   Referring to claim 12, Christeson and Wu teach all the limitations (See rejection

of claim 10) including a recovery mode that executes the recovery BIOS, this is

interpreted as executing only recovery initiation modules in an event of a recovery

restart (See Christeson, Col. 3, lines 16-25).

17.   Referring to claim 13, Christeson and Wu disclose all the limitations (See

rejection of claim 11) including updating the BIOS, this interpreted as an updated

recovery initiation module added to the BIOS firmware to replace an outdated recovery initiation module (See Christeson, Col. 2, lines 15-20).

18.   Referring to claim 14, Christeson and Wu teach all the limitations (See rejection of claim 13) including the verification of the flash memory area, this is interpreted as automatically evaluating at least one of the recovery initiation modules (See Christeson, Col. 3, lines 26-35). Christeson discloses updating the BIOS including recovery BIOS, this interpreted as removing recovery initiation module designation from a least one of the recovery initiation modules if the designation is solely due to dependence thereon by the outdated recovery initiation module (See Col. 2, lines 15-20 and lines 52-57).

19.   Referring to claim 15, Christeson and Wu teach all the limitations (See rejection of claim 10) including locking the recovery BIOS, this is interpreted as wherein the recovery initiation modules are rendered unalterable (See Christeson, Col. 2, lines 52-54).

20.   Referring to claim 16, Christeson and Wu disclose all the limitations (See rejection of claim 15) including the recovery BIOS being located in non-volatile memory, this is interpreted as the initiation module reside in a fault-tolerant firmware block (See Christeson, Col. 2, lines 15-20).

21.   Referring to claim 17, Christeson and Wu teach all the limitations (See rejection of claim 16) including a block of code reference numbers "202", "203", "204" and "205" that add up to 64KB and contains the recovery BIOS, this is interpreted as the recovery initiation modules contained in a 64 kilobyte block of code (See Christeson, Fig. 2).

22.   Referring to claim 18, Christeson and Wu disclose all the limitations (See rejection of claim 10) including the recovery being used because of a corruption from power failure or other reasons, this is interpreted as the recovery of the computing system is necessitated by an event selected from the group consisting of power failure, hardware failure, and security error (See Christeson, Col. 3, lines 1-4).

23.   Referring to claim 19, Christeson teaches a apparatus for dynamically updating BIOS firmware parts that includes both normal BIOS and recovery BIOS and using an additional BIOS region to extend the system BIOS memory area, this is interpreted as adding an initiation module to a BIOS firmware of a computing system, the BIOS firmware having a plurality of initiation modules including recovery initiation modules for recovering of the computing system and non-recovery modules (See Col. 1, lines 25-45 and Col. 2, lines 15-57).

Christeson also teaches the verification of the flash memory area which includes the BIOS, this is interpreted as automatically evaluating a new initiation module (See Col. 3, lines 26-35 and Col. 4, lines 49-51). Christeson also discloses storing BIOS instructions in the flash memory. The BIOS includes both a normal BIOS in one

memory block and recovery BIOS in another area of the flash memory, or the

"designated" recovery area of the flash memory. Finally, Christeson teaches updating

the BIOS including the recovery portion. This is interpreted as designating the new

initiation module as a recovery initiation module if the initiation is required for the

recovery of the computing system (See Col. 2, lines 41-57).

Christeson does not teach the computer system having an extensible firmware

architecture, however Christeson does teach about updating the BIOS and rebooting in

the process (See Col. 12, lines 50-57). Wu teaches updating a system BIOS which

includes a Extensible Firmware Interface (See Col. 3, lines 45-52). It would have been

obvious to one of ordinary skill in the art at the time of the invention to combine the

BIOS update of Christeson with the EFI of Wu. This would have been obvious to one of

ordinary skill in the art at the time of the invention to do because the EFI is dedicated to

the booting environment (See Wu, Col. 3, lines 45-52).

24.   Referring to claim 20, Christeson and Wu disclose all the limitations (See

rejection of claim 19) including have a block containing all the recovery BIOS, and all

parts of the BIOS in the recovery block are part of the recovery BIOS, this is interpreted

as designating the initiation module as a recovery initiation module if another recovery

initiation module depends upon the new initiation module (See Christeson, Col. 2, lines

52-57).

25.   Referring to claim 21, Christeson and Wu teach all the limitations (See rejection

of claim 20) including a recovery mode that executes the recovery BIOS, this is

interpreted as executing only recovery initiation modules in an event of a recovery

restart (See Christeson, Col. 3, lines 16-25).

26.   Referring to claim 22, Christeson and Wu disclose all the limitations (See

rejection of claim 20) including updating the BIOS, this interpreted as an updated

recovery initiation module added to the BIOS firmware to replace an outdated recovery

initiation module (See Christeson, Col. 2, lines 15-20).

27.   Referring to claim 23, Christeson and Wu teach all the limitations (See rejection

of claim 21) including the verification of the flash memory area, this is interpreted as

automatically evaluating at least one of the recovery initiation modules (See Christeson,

Col. 3, lines 26-35). Christeson discloses updating the BIOS including recovery BIOS,

this interpreted as removing the recovery initiation module designation from all initiation

modules designated as recovery initiation modules solely due to dependence thereon

by the outdated recovery initiation module (See Col. 2, lines 15-20 and lines 52-57).

28.   Referring to claim 24, Christeson and Wu teach all the limitations (See rejection

of claim 19) including locking the recovery BIOS, this is interpreted as wherein the

recovery initiation modules are rendered unalterable (See Christeson, Col. 2, lines 52-

54).

29.   Referring to claim 25, Christeson and Wu disclose all the limitations (See

rejection of claim 24) including the recovery BIOS being located in non-volatile memory,

this is interpreted as the initiation module reside in a fault-tolerant firmware block (See

Christeson, Col. 2, lines 15-20).

30.   Referring to claim 26, Christeson and Wu teach all the limitations (See rejection

of claim 25) including a block of code reference numbers "202", "203", "204" and "205"

that add up to 64KB and contains the recovery BIOS, this is interpreted as the recovery

initiation modules contained in a 64 kilobyte block of code (See Christeson, Fig. 2).

31.   Referring to claim 27, Christeson and Wu disclose all the limitations (See

rejection of claim 19) including the recovery being used because of a corruption from

power failure or other reasons, this is interpreted as the recovery of the computing

system is necessitated by an event selected from the group consisting of power failure,

hardware failure, and security error (See Christeson, Col. 3, lines 1-4).

Response to Arguments

32.   Applicant's arguments, see pages 2 and 3 of pre-brief appeal, filed 10 July 2006,

with respect to the rejection(s) of claim(s) 1-27 under 35 U.S.C. 102(b) have been fully

considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of new found prior art.

Concerning the argument that Christeson does not teach evaluating the initiation module. Christeson also teaches the verification of the flash memory area (See Col. 3, lines 26-35). The flash memory contains the BIOS thus verification of the flash memory is verification of the initiation modules of the BIOS (See Col. 4, lines 49-51). Evaluating a initiation module would include verifying the module. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Evaluation is to determine if the new initiation module is designated as recovery initiation module.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Concerning the argument that Christeson does not teach designating the new initiation module as recovery module, the Examiner respectfully disagrees. Finally Christeson also discloses storing BIOS instructions in the flash memory. The BIOS includes both a normal BIOS in one memory block and recovery BIOS in another area of the flash memory, or the "designated" recovery area of the flash memory. Finally, Christeson teaches updating the BIOS including the recovery portion. (See Col. 2, lines 41-57). By placing the update in the recovery BIOS as opposed to placing the update in the normal BIOS is "designated" the new initiation module as a recovery initiation module since it is required for recovery. Christeson also says that each of the

separately programmable regions of flash memory may be modified or updated using

the dynamic update mechanism (See Col. 2, lines 54-57).

Conclusion

33.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph D. Manoskey whose telephone number is (571)

272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDM
October 13, 2006